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| APPLICATION N | 0. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------------|----------------|----------------------|-------------------------|------------------|
| 10/709,990 | 10/709,990 06/11/2004 | | Cheng-Yi Liu | 11416-US-PA | 3989 |
| 31561 | 7590 | 06/02/2006 | | EXAMINER | |
| • | | ITELLECTUAL PF | IP, SIKYIN | | |
| 7 FLOOR-1, NO. 100 ROOSEVELT ROAD, SECTION 2 | | | ART UNIT | PAPER NUMBER | |
| TAIPEI, 100 | | | | 1742 | |
| TAIWAN | TAIWAN | | | DATE MAILED: 06/02/2006 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | | |
|---|---|--|--|--|--|--|
| | 10/709,990 | LIU ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Sikyin Ip | 1742 | | | | |
| The MAILING DATE of this communication app Period for Reply | pears on the cover sheet with the | correspondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be to y within the statutory minimum of thirty (30) dawill apply and will expire SIX (6) MONTHS from the cause the application to become ABANDON | imely filed ays will be considered timely. In the mailing date of this communication. ED (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 3/15. 2a) This action is FINAL. 2b) This 3) Since this application is in condition for alloware closed in accordance with the practice under Exercise. | s action is non-final. nce except for formal matters, pr | | | | | |
| Disposition of Claims | | | | | | |
| 4) ☐ Claim(s) 1-3,5,6,8 and 9 is/are pending in the 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-3,5,6,8 and 9 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examine | wn from consideration. or election requirement. | | | | | |
| 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the | | | | | | |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex | • | , | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat * See the attached detailed Office action for a list | is have been received. is have been received in Applica rity documents have been receiv u (PCT Rule 17.2(a)). | tion No ved in this National Stage | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summar Paper No(s)/Mail I Solution of Informal 6) Other: | | | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3, 5, 6, and 8-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 1, the amended lower limits of Sb and IIIB group component are not literally supported in specification as original filed.

Claim Rejections - 35 USC § 103

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3, 5, 6, and 8-9 are rejected under 35 U.S.C. § 103 as being unpatentable over USP 4009027 to Naidich et al (col. 3, line 57 to col. 4, line 16) in view of JP 06081057 (reference of record with added machine translation).

Naidich discloses the features including the claimed solder compositions containing Cr and other elements except for IIIB group elements such as Ce. However, JP 06081057 in Detailed Description [0008] teaches elements such as Ce and etc in the same field of endeavor or the analogous metallurgical art to improve cast/weld structure and high temperature strength. It has been held that combining known ingredient having known functions, to provide a composition having the additive effect of each of the known functions is within realm of performance of ordinary skill artisan. In re Castner, 186 USPQ 213 (217). As pointed out by the court, In re Kerkhoven 205 USPQ 1069, "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition which is to be used for the very same purpose." Cites In re Susi 169 USPQ 423, 426 (CCPA 1971); In re Crockett 126 USPQ 186, 188 (CCPA 1986).

References disclose Sb and Ce contents which are 1 wt.% lower than amended Sb and Ce contents. But, it is well settled that a prima facie case of obviousness would exist where the claimed ranges and prior art do not overlap but are close enough that one ordinary skilled in the art would have expected them to have the same properties,

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In re Titanium Metals Corporation of America v. Banner, 227 USPQ 773 (Fed. Cir. 1985). To overcome the prima facie case, an applicant must show that there are substantial, actual differences between the properties of the claimed compound and the prior art compound. In re Hoch, 428 F.2d 1343-44, 166 USPQ 406 at 409.

Response to Arguments

Applicant's arguments filed March 15, 2006 have been fully considered but they are not persuasive.

Applicants' argument with respect to Sb and Ce contents is noted. But, it is well settled that a prima facie case of obviousness would exist where the claimed ranges and prior art do not overlap but are close enough that one ordinary skilled in the art would have expected them to have the same properties, In re Titanium Metals Corporation of America v. Banner, 227 USPQ 773 (Fed. Cir. 1985). To overcome the prima facie case, an applicant must show that there are substantial, actual differences between the properties of the claimed compound and the prior art compound. In re Hoch, 428 F.2d 1343-44, 166 USPQ 406 at 409.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Applicant is reminded that when amendment and/or revision is required, applicant should therefore specifically point out the support for any amendments made to the disclosure. See 37 C.F.R. § 1.121.

Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Ip whose telephone number is (571) 272-1241. The examiner can normally be reached on Monday to Friday from 5:30 A.M. to 2:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Roy V. King, can be reached on (571)-272-1244.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SIKYIN IP PRIMARY EXAMINER ART UNIT 1742

S. Ip May 30, 2006